

AMENDMENTS TO THE CLAIMS

Claims 1-5 (Canceled)

Claim 6 (New) A shaft seal mechanism forming a leaf seal in an annular space between a rotor and a stator, comprising:

 a plurality of thin plates lapped on one another in layers in a circumferential direction of the rotor and arranged in the annular space between the rotor and the stator so as to form a thin plate assembly of an annular shape; and

 a pair of flexible thin plate retaining rings between which an outer circumferential proximal end side of each of said thin plates is pinched so as to be retained by said retaining rings;

 wherein said outer circumferential proximal end side of each of said thin plates is supported on a stator side and an inner circumferential distal end side of each of said thin plates is non-fixed to an outer circumferential surface of said rotor so that said thin plate assembly of annular shape divides the annular space into a higher pressure side area and a lower pressure side area.

Claim 7 (New) The shaft seal mechanism of claim 6, and further comprising a deviation preventing member arranged between said outer circumferential proximal end side of said thin plates and said thin plate retaining rings so as to regulate motion of each of said thin plates relative to said thin plate retaining rings.

Claim 8 (New) The shaft seal mechanism of claim 7, wherein:

 said thin plate assembly has a side edge, in an axial direction of the rotor, formed with a recess;

 a plate has a side surface formed with a stepped portion engageable with said recess;

 said plate is arranged to abut said thin plate assembly in the axial direction of said rotor so that said stepped portion corresponds to said recess; and

 said thin plate assembly is pinched together with said plate between said pair of flexible thin plate retaining rings.

Claim 9 (New) The shaft seal mechanism of claim 6, wherein:

said thin plate assembly has a side edge, in an axial direction of the rotor, formed with a recess;

a plate has a side surface formed with a stepped portion engageable with said recess;

said plate is arranged to abut said thin plate assembly in the axial direction of said rotor so that said stepped portion corresponds to said recess; and

said thin plate assembly is pinched together with said plate between said pair of flexible thin plate retaining rings.

Claim 10 (New) A shaft seal mechanism forming a leaf seal between a rotor and a stator, comprising:

a plurality of thin plates lapped on one another in layers in a circumferential direction of the rotor and arranged in an annular space between the rotor and the stator so as to form a thin plate assembly of an annular shape;

wherein said outer circumferential proximal end side of each of said thin plates is supported on a stator side and an inner circumferential distal end side of each of said thin plates is non-fixed to an outer circumferential surface of said rotor so that said thin plate assembly of annular shape divides the annular space into a higher pressure side area and a lower pressure side area; and

wherein mutually adjacent ones of said outer circumferential proximal end sides of said thin plates of said thin plate assembly are welded to each other so as to be fixed to each other and said thin plate assembly of said thin plates so welded is bent along a circumferential plane of said annular space.

Claim 11 (New) A shaft seal mechanism forming a leaf seal in an annular space between a rotor and a stator, comprising:

a plurality of thin plates, each of said thin plates having a length with an outer circumferential proximal end side at one end and an inner circumferential distal end side at an opposite end, a width

extending in an axial direction of said rotor, and a thickness, wherein each of said thin plates is wider than it is thick at said inner circumferential distal end side;

wherein said plurality of thin plates are lapped in a circumferential direction of the rotor to form a thin plate assembly in which said thin plates overlap each other in their thickness direction; and

a pair of flexible thin plate retaining rings between which said outer circumferential proximal end side of each of said thin plates is held so as to be retained by said retaining rings;

wherein said outer circumferential proximal end side of each of said thin plates is supported on a stator side and said inner circumferential distal end side of each of said thin plates is non-fixed to an outer circumferential surface of said rotor so that said thin plate assembly of annular shape divides the annular space into a higher pressure side area and a lower pressure side area.

Claim 12 (New) The shaft seal mechanism of claim 6, wherein each of said thin plates has a length, width and thickness, wherein each said width extends in an axial direction of the rotor, and each said thickness extends in a direction in which said thin plates are lapped, said width being greater than said thickness.